Panasonic recommends Windows 8 Pro.

Panasonic

TOUGHBOOK CF-19

THE FULLY RUGGED CONVERTIBLE TOUGHBOOK.

Featuring a revolutionary LCD screen that transforms from a high-performance notebook to a fully portable tablet PC, the CF-19 convertible tablet PC is reliable, durable and balanced lightweight at just 2.3kg. The optimized transflective plus display technology with low reflection allows for perfect visibility even in direct sunlight environments (up to 6.500cd/m^2 reflective brightness, depending on light conditions).

The LCD itself is protected by a durable scratch-resistant magnesium alloy case, mounted to the base cabinet with a reinforced 180 degree rotatable hinge. Data is secured on the hard disk drive - enclosed in a shock-absorbing damper that sits inside an aluminium case. A double waterproof structure ensures a tight, durable seal that complies with IP65* water and dust-proofing standards and a special HDD-heater counters any adverse temperatures. These striking features ensure that you can rely on the CF-19, even in extreme conditions.

- Intel® Core™ i5-3320M vPro processor
- Genuine Windows® 7 Professional
- Intel HD 4000 graphics
- Vibration and shock resistant (MIL-STD 810G)*
- Water and dust resistant (IP65, MIL-STD 810G)*
- Balanced lightweight at just 2.3kg
- Extremely bright 10.1" transflective plus LCD with Touchscreen or Dual Touch (up to 6.500cd/m2 reflective brightness, depending on light conditions)
- Ambient light sensor for advanced power management
- USB 3.0 SuperSpeed port
- Long battery life of up to 10 hours
- 3G mobile broadband optional (HSPA+, up to 21Mbps)
- Panasonic dashboard management software
- Concealed Mode to switch PC into "silent mode"

* Tested by an independent third party lab following MIL-STD-810G and IEC 60529, Sections 13.4, 13.6.2, 14.2.5 and 14.3.

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MOBILE BUSINESS EXCELLENCE

The 3rd generation Intel® Core™ i5 with vPro™ technology and standard Intel® Core™ i5-3320M processor delivers high performance and efficient energy consumption. Embedded WLAN and optional 3G Mobile Broadband capabilities enable wireless data transfer for business communication. The high-power battery allows for a running time of up to 10 hours. The CF-19 is the marketing-leading, rotating screen, convertible notebook, which sets the benchmark in ruggedness.

Mobile Computing Platform	Intel® Core™ i5-3320M vPro™ processor	
	(2.6GHz, 3MB Intel® Smart Cache, Intel® 7 series Express chipset QM77)	
Operating System	Genuine Windows® 7 Professional	
RAM	4 GB, DDR3 SDRAM (max. 8 GB)	
Graphic Chip	Intel® HD Graphics 4000, UMA (Windows® 7 64bit max 1696MB, 32bit max 1557MB)	
Storage	500GB HDD (SATA, easy accessible, shock resistant - withstands 180cm* drop)	
LCD	10.1" sunlight-viewable transflective plus XGA Active Matrix (TFT) colour LCD with circular polarizer (up to 500cd/m² transmissive and	
	6.500cd/m² reflective brightness, depending on light conditions) and ambient light sensor; Concealed Mode	
Cabinet	Full magnesium alloy with handstrap	
Bluetooth™	Version 4.0 + EDR Class 1	
WLAN	Intel® Centrino® Advanced-N 6235 802.11 a/b/g/n compliant; slide on/off switch	
LAN	1000BASE-T/100BASE-TX/10Base-T	
Modem	Data : 56 kbps V.92; FAX : 14.4 kbps / voice not compatible	
Sound	Intel® High-Definition audio compliant	
	Monaural speaker (integrated in display cabinet)	
Input Devices	Touchscreen or Dual Touch (resistive Touchscreen & Digitizer), Touchpad and Keyboard	
Indicators	9 LEDs (Power, Battery, HDD, Caps Lock, Scroll Lock, Num Lock, SD Card, WWAN, Wireless Data Transfer)	
Interfaces	Serial (16550A compatible)	Dsub, 9-pin
	Serial (16550A compatible)	Dsub, 9-pin
	External display (VGA port)	Mini D-sub, 15-pin
	Headphone	Mini-jack, 3.5 DIA, stereo
	Microphone	Mini-jack, 3.5 DIA, stereo
	DC In	Jack
	USB 2.0	x1, 4-pin
	USB 3.0	x1, 9-pin
	Modem	RJ-11
	LAN	RJ-45
	Firewire (IEEE1394a):	x1, 4-pin
	External Antenna:	x2 (Dedicated 50 ohms coaxial connector)
	Port Replicator:	100-pin
Expansion Slots	PC Card:	x1 Type II (3.3V: 400mA, 5V: 400mA)
	Express Card:	x1 ExpressCard/34 or ExpressCard/54
	SD/SDXC Memory Card:	x1
	RAM Module:	x1 DDR3L
Power	AC Adapter:	Input: 100 – 240V AC, 50Hz/60Hz; Output: 16V DC, 5A
	Battery:	Li-ion 10.65V, 5.7Ah (typical), 5.4Ah (minimum)
	Battery Life:	Approx. 10 hours (Mobile Mark™ 2007, 60cd/m²)
Power Management	Standby function, Hibernation function, ACPI BIOS	
Security Features	TPM (Trusted Platform Module, TCG V1.2 compliant), Integrated hardware security lock slot, Password security	
Dimensions (WxHxD)	271mm x 49mm x 216mm / 10.7" x 1.93" x 8.5" (excluding protrusions)	
Weight	Approx. 2.3kg / 5.0lb (including battery)	
Integrated Options	GPS, Fingerprint Reader, Smart Card Reader, 3G Mobile Broadband (HSPA+, up to 21Mbps), Solid State Disk, Bottom 3MP camera with dual LED light (Project based)	
Accessories	AC Adapter:	CF-AA6503A
	Battery Charger:	CF-VCBTB2W
	Battery Pack:	CF-VZSU48U
	Car-Charger:	CF-AAV1601W (Type A, 60W,12V/24V)
		CF-LND8024FD (EIAJ & Type A both 80W, 12-32V)
	Car-Mount:	CF-WEB194B
	Port-Replicator:	CF-VEB191AU
	Carrying and CDS Docking Solutions:	Please visit www.toughbook.eu
Testing Standards	Water resistance test:	IEC529 (JIS C0920) IPX5*, MIL-STD 810G 506.5, III*
	Dust resistance test:	IEC529 (JIS C0920) IP6X*, MIL-STD 810G 510.5, Level*
	Gravity drop resistance test:	MIL-STD 810G 516.6, (180cm* drop)
	Vibration resistance test:	MIL-STD 810G 514.6, category 20 & 24*

As an ENERGY STAR® Partner, Panasonic Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency. Active Matrix colour display conforms to industry standards. Some displays may contain isolated illuminated or dark pixels as an artefact of the manufacturing process (effective pixels: minimum 99.998%). RAM capacity calculated as follows: 1MB = 1,048,576 bytes. HDD capacity calculated as follows: 1GB = 1,000,000,000 bytes. Toughbook is a brand name and registered trademark of Panasonic Corporation. Acrobat® is a registered trademark of Adobe® Systems Incorporated. Intel, the Intel logo, Intel Core, Intel vPro, Core Inside and vPro Inside are trademarks of Intel Corporation in the U.S. and other countries. Microsoft® and Windows® are registered trademarks of Microsoft® Corporation of the United States and/or other countries. All other brand names shown are the registered trademarks of the relevant companies. All rights reserved. All working conditions, times and figures quoted are optimum or ideal levels and may differ as a result of individual and local circumstances.

* Tested by an independent third party lab following MIL-STD-810G and IEC 60529, Sections 13.4, 13.6.2, 14.2.5 and 14.3

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